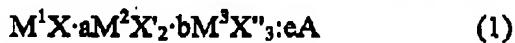


**IN THE CLAIMS**

1. (Original) A radiographic image conversion panel comprising:  
a support; and  
at least one photostimulable phosphor layer provided on the support,  
wherein at least one layer of the photostimulable phosphor layers is formed by a  
photostimulable phosphor represented by a following general formula (1), and  
an amount of activation metal atoms at an end of a photostimulable phosphor crystal and  
an amount of activation metal atoms in the vicinity of the support satisfy a following formula 1:  
 $0 \leq (\text{the amount of the activation metal atoms at the end of the photostimulable phosphor crystal}) / (\text{the amount of the activation metal atoms in the vicinity of the support}) < 1$ , and

the general formula (1) is expressed by



wherein the  $M^1$  is at least one kind of alkali metal selected from a group consisting of Li, Na, K, Rb and Cs, the  $M^2$  is at least one kind of bivalent metal atom selected from a group consisting of Be, Mg, Ca, Sr, Ba, Zn, Cd, Cu and Ni, the  $M^3$  is at least one kind of trivalent metal atom selected from a group consisting of Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Al, Ga and In, each of the X, the  $X'$  and the  $X''$  is at least one kind of halogen selected from a group consisting of F, Cl, Br and I, the A is at least one kind of metal atom selected from a group consisting of Eu, Tb, In, Ce, Tm, Dy, Pr, Ho, Nd, Yb, Er, Gd, Lu, Sm, Y, Tl, Na, Ag, Cu and Mg and each of the a, the b and the e represents a numeric value in a range of  $0 \leq a < 0.5$ ,  $0 \leq b < 0.5$  and  $0 < e \leq 0.2$ .

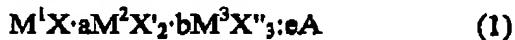
2. (Original) A radiographic image conversion panel comprising:  
a support; and  
at least one photostimulable phosphor layer provided on the support,  
wherein at least one layer of the photostimulable phosphor layers contains a  
photostimulable phosphor using an alkali halide represented by a following general formula (1)  
as a ground material, and  
the photostimulable phosphor layer is formed so as to have a thickness from 50  $\mu\text{m}$  to 20

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mm by a vapor phase growth method, and a mean crystal size in the photostimulable phosphor of the photostimulable phosphor layer is from 90 to 1000 nm, and

the general formula (1) is expressed by



wherein the  $M^1$  is at least one kind of alkali metal selected from a group consisting of Li, Na, K, Rb and Cs, the  $M^2$  is at least one kind of bivalent metal atom selected from a group consisting of Be, Mg, Ca, Sr, Ba, Zn, Cd, Cu and Ni, the  $M^3$  is at least one kind of trivalent metal atom selected from a group consisting of Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Al, Ga and In, each of the X, the  $X'$  and the  $X''$  is at least one kind of halogen selected from a group consisting of F, Cl, Br and I, the A is at least one kind of metal atom selected from a group consisting of Eu, Tb, In, Ce, Tm, Dy, Pr, Ho, Nd, Yb, Er, Gd, Lu, Sm, Y, Tl, Na, Ag, Cu and Mg and each of the a, the b and the e represents a numeric value in a range of  $0 \leq a < 0.5$ ,  $0 \leq b < 0.5$  and  $0 < e \leq 0.2$ .

3. (Original) The radiographic image conversion panel of claim 1, wherein the photostimulable phosphor is CsBr:Eu.

4. (Original) The radiographic image conversion panel of claim 2, wherein the photostimulable phosphor is CsBr:Eu.

5. (Original) A method for manufacturing the radiographic image conversion panel of claim 1, comprising controlling a deposition rate of a main agent of the photostimulable phosphor and a deposition rate of an activator of the photostimulable phosphor by at least two or more systems.

6. (Original) A method for manufacturing the radiographic image conversion panel of claim 2, comprising controlling a deposition rate of a main agent of the photostimulable phosphor and a deposition rate of an activator of the photostimulable phosphor by at least two or more systems.

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7. (Original) A method for manufacturing a radiographic image conversion panel comprising a support and a photostimulable phosphor layer provided on the support; the method comprising adding Rb atoms to a photostimulable phosphor of the photostimulable phosphor layer so that a ratio of the Rb atoms to Cs atoms is 1/1,000,000 to 5/1,000 mol.

8. (Original) A radiographic image conversion panel comprising a photostimulable phosphor obtained by the method for manufacturing the radiographic image conversion panel of claim 7, wherein in the photostimulable phosphor, a main peak is shown from a (400) face in accordance with a result of X-ray diffraction.

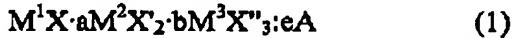
9. (Original) The radiographic image conversion panel of claim 8, comprising: a photostimulable phosphor layer,

wherein the photostimulable phosphor layers contains the photostimulable phosphor using an alkali halide represented by a following general formula (1) as a ground material,

the photostimulable phosphor layer is formed by spherical phosphor particles and a polymer material,

the photostimulable phosphor layer is formed so as to have a thickness from 50  $\mu$ m to 20 mm,

the general formula (1) is expressed by



wherein the  $M^1$  is at least one kind of alkali metal selected from a group consisting of Li, Na, K, Rb and Cs, the  $M^2$  is at least one kind of bivalent metal atom selected from a group consisting of Be, Mg, Ca, Sr, Ba, Zn, Cd, Cu and Ni, the  $M^3$  is at least one kind of trivalent metal atom selected from a group consisting of Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Al, Ga and In, each of the  $X$ , the  $X'$  and the  $X''$  is at least one kind of halogen selected from a group consisting of F, Cl, Br and I, the  $A$  is at least one kind of metal atom selected from a group consisting of Eu, Tb, In, Ce, Tm, Dy, Pr, Ho, Nd, Yb, Er, Gd, Lu, Sm, Y, Tl, Na, Ag, Cu and Mg and each of the  $a$ , the  $b$  and the  $e$  represents a numeric value in a range of  $0 \leq a < 0.5$ ,  $0 \leq b < 0.5$  and  $0 < e \leq 0.2$ .

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10. (Original) The radiographic image conversion panel of claim 8, wherein phosphor fine particles in the photostimulable phosphor are formed by heating at 400°C or more.

11. (Original) A photostimulable phosphor precursor, wherein phosphor particles in the radiographic image conversion panel of claim 8 are formed in a vacuum.

12. (Original) A method for forming the photostimulable phosphor precursor of claim 11, comprising:

sequentially forming a liquid membrane phase in a liquid phase containing Cs atoms, and adding an organic solvent having a solubility different from that of the liquid phase containing Cs atoms under stirring.

13. (Original) A photostimulable phosphor obtained by calcining the phosphor precursor of claim 11 at 600 to 800°C.

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